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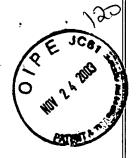
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IN THE UNITED STATES PATENT AND TRADEMARK O

Applicant(s): Triantopoulos et al.

CONNECTOR

Examiner:

C. Prassad

Serial No.:

10/047,471

Group Art Unit: 2839

Filed:

January 12, 2002

Docket:

577-521

For: TRANSFORMER STUD

Dated:

November 21, 2003

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<u>APPEAL BRIEF</u>

Sir:

This is an appeal to the Board of Patent Appeals and Interferences from a decision mailed August 20, 2003 wherein the Examiner finally rejected claims 1-9. No claims of this application have been allowed. Appellants have timely filed a Notice of Appeal by certification on September 22, 2003. This Brief is being filed in support of that Notice of Appeal. As required by 37 C.F.R. §1.192, this Brief is being filed in triplicate. The fee for filing this Brief of \$320.00 is provided by enclosed check. Please charge any additional fees or credit any overpayments to Deposit Account No. 08-2461.

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I. REAL PARTY IN INTEREST

The real party of interest in the present appeal is Thomas & Betts International, Inc., assignee of the entire right, title and interest in and to the above-identified application.

II. RELATED APPEALS AND INTERFERENCES

No related appeal or interferences are presently pending which are known to Appellants, Appellants' legal representative, or assignee which will directly affect, be directly affected by, or have a bearing on the Board's decision on this Appeal.

III. STATUS OF THE CLAIMS

Claims 1-9 are pending and stand finally rejected in this application. The rejection of claims 1-9 is being appealed.

Claims 1-3 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,214,806 to Kraft (hereinafter "Kraft").

Claims 4-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,214,806 to Kraft (hereinafter "Kraft").

IV. STATUS OF AMENDMENTS

The Examiner finally rejected the claims of the above-identified application in an Office Action mailed August 20, 2003. No further response has been presented since the final rejection.

V. SUMMARY OF THE INVENTION

The invention defined by the claims on appeal relates to a connector for connecting multiple conductors to a transformer. The connector is a generally elongate cylindrical body having a central bore therethrough, which may be internally threaded to accommodate the externally threaded transformer stud. The connector is integrally formed single piece metallic member having high electrical conductivity and further includes an elongate conductor accommodating portion which is a generally solid rectangular member extending the length of the cylindrical body. The conductor-accommodating portion extends along the cylindrical body in side-by-side relationship. The portion includes a plurality of longitudinally spaced conductor receiving ports spaced along the length of the conductor accommodating portions so as to be longitudinally coextensive with the longitudinal bore of the central body. Each of the ports extend from one side surface of the conductor accommodating portion so that conductors inserted into the ports are inserted from the same direction. The conductor accommodating portion further includes a plurality of set screw accommodating apertures, wherein each set screw aperture is in communication with the respective conductor receiving port so that set screws may be inserted therein to mechanically and electrically secure the ends of the conductors within the stud connector.

The configuration of the connector of the present invention is that it provides a transformer stud connector, which will accommodate multiple cables without extending the overall length of the connector.

VI. ISSUES ON APPEAL

The issues on appeal are as follows:

- 1. Whether claims 1-3 are anticipated under 35 U.S.C. §102(b) by Kraft.
- 2. Whether claims 4-9 are unpatentable under 35 U.S.C. §103(a) as obvious over Kraft.

VII. GROUPING OF CLAIMS

Claims 1-9 should be considered as one grouping.

For the purposes of the present Appeal, it is respectfully submitted that independent claim 1 meets the statutory criteria for patentability. The patentability of the dependent claims will be predicated thereon.

VIII. ARGUMENTS

A. REJECTIONS UNDER 35 U.S.C. §102

1. The rejection of claims 1-3 under 35 U.S.C. §102(b) as being anticipated by Kraft

Kraft discloses an electrically conductive connector adapted to be coupled with a stud to form an electrical connection. The connector includes an electrical terminal with an electrically conductive terminal aperture. The aperture has a larger diameter than the stud so as to facilitate introduction of the stud therein. A set screw is threadedly mounted on the electrical terminal in position to be actuated from the exterior of the electrical terminal to be reciprocally passed across the aperture to engage the stud inserted therein and form a fixed electrical connection between the stud and connector and to resist movement from any forces applied to the connector. Also provided is at least one terminal port to facilitate electrical connection to selected conductors. Set screws are provided to form the tight interconnection between conventional conductors which are inserted through the terminal port.

The connector of the Kraft patent clearly differs from the connector claimed in Applicant's invention. The Kraft patent fails to show a connector for attachment to an extending transformer stud having conductor insertion apertures spaced along the length of the conductor accommodating body "so as to be longitudinally coextensive with said longitudinal bore of said central body", as recited in independent claim 1. Kraft discloses a connector having threaded end aperture and terminal ports adapted to receive electrical

conductors. Set screws are provided for the tight interconnection between the conductors and the connector. The conductors are held in position by threaded set screws which are in alignment with the terminal ports. The connector has a threaded end aperture which is perpendicular to the terminal ports, and is designed to receive reciprocally therein a mounting stud of a conventional transformer. The terminal ports are clearly distal from the threaded aperture. In contrast to the present invention, the Kraft patent fails to show or describe a connector for attachment to an extending transformer stud having conductor insertion apertures spaced along the length of the conductor accommodating body "so as to be longitudinally coextensive with said longitudinal bore of said central body" as recited in independent claim 1. As described in column 2, lines 46-57, and shown in Fig. 1 of Kraft, ports 30 and 32 and set screws 34 and 36 are positioned in perpendicular relationship to each other respectively along the axis of the threaded end aperture. Therefore, because of the location of the conductor ports and associated set screws the threaded end aperture cannot extend along the connector to be coextensive with the terminal ports.

As claim 1 recites features not found in the Kraft patent, claim 1 cannot as a matter of law be anticipated by Kraft, which places claim 1 in a condition for allowance.

Claims 2 and 3 depend from independent claim 1 and incorporate by reference all the features thereof. Applicant maintains that independent claim 1 is not anticipated by Kraft because the reference fails to teach all of the features of the claim as discussed above.

Therefore, Applicant respectfully submits that the dependent claims 2 and 3 are allowable for the same reasons as advanced for the allowability of claim 1.

It is well settled that in order for a reference to be anticipatory, each and every element of the claimed invention must be disclosed in a single prior art reference. *In re Spada*, 15 USPQ 2d 1655 (Fed. Cir. 1990). The Kraft reference fails to disclose, show or describe a connector for attachment to an extending transformer stud having conductor insertion apertures spaced along the length of the conductor accommodating body "so as to be longitudinally coextensive with said longitudinal bore of said central body".

Notwithstanding the above, and assuming, arguendo, that Kraft discloses a connector comprising an elongated central body with a central longitudinal bore for attachment to a transformer stud and an elongated conductor accommodating body extending along the central body and having a plurality of conductor insertion apertures and a plurality of screw apertures for receiving a plurality of screws, the apertures being spaced along a length of conductor accommodating body along a longitudinal direction as alleged by the Examiner, there is no disclosure whatsoever in Kraft, that the conductor insertion apertures spaced along the length of the conductor accommodating body are "longitudinally coextensive with said longitudinal bore of said central body". The longitudinal central bore for receiving the mounting stud cannot be longitudinally coextensive with the conductor insertion apertures in the arrangement disclosed in Kraft. In Kraft, the central bore cannot extend longitudinally along the connector beyond any conductor insertion ports as it would therefore obstruct the conductor port, preventing insertion of the conductor to a sufficient depth to be secured by a set screw. Therefore, failing to clearly disclose each and every claimed element, Kraft cannot be anticipatory of independent claim 1 of the present invention.

Accordingly, the reversal of the Examiner's rejection of claims 1 as being anticipated by Kraft is warranted.

B. REJECTIONS UNDER 35 U.S.C. §103

1. The rejection of claims 4-9 as being obvious over Kraft

As noted above, Kraft is deficient in that Kraft fails to disclose within the reference, a connector for attachment to an extending transformer stud having conductor insertion apertures spaced along the length of the conductor accommodating body "so as to be longitudinally coextensive with said longitudinal bore of said central body". The Examiner alleges that "Kraft shows all the features of theses claims as described in Paragraph 3 above except another longitudinal body running along the central body with plurality of conductor accommodating and screw accommodating apertures and the orientation of the second body and the apertures therein." Thus, one may not consider Kraft as anticipating because it does not explicitly disclose an additional elongate conductor accommodating body as set forth in dependent claim 4.

The Examiner therefore concludes that it would have been obvious "to provide another longitudinal body running along the central body with a plurality of apertures for accommodating conductor and screws".

Claims 4 - 9 depend from independent claim 1 and incorporate by reference all the features thereof. Applicant maintains that Kraft fails to teach all of the features of the

independent claim 1 as discussed above. Therefore, Applicant respectfully submits that the dependent claims 4 - 9 are allowable for the same reasons as advanced for the allowability of claim 1.

Furthermore, Kraft contains no teaching or suggestion regarding the length of the connector or providing a connector having conductor insertion apertures coextensive with the longitudinal bore of the central body thus, Kraft fails as an effective Section 103 rejection.

Motivation to look to Kraft is lacking in the body of its disclosure, therefore, the Examiner has failed to make a *prima facie* case of obviousness.

Finally, the Examiner contends that the instant invention does not provide any reasons or specific problems to be solved by a specific orientation. However, Applicant clearly states at Paragraphs 6 and 7 that "Thus, conventional transformer stud connectors are excessively long. This construction of the transformer stud connector, therefore, results in the secondary side of the transformer cabinet having to have sufficient space and longitudinal clearance to accommodate the connector. It is desirable to provide a transformer stud connector which will accommodate multiple cables without extending the overall length of the connector." Thus, specific reasons and problems to be solved by the orientation of the first and second conductor accommodating portions is clearly provided.

It is therefore respectfully submitted that claims 4-9 are patentably distinct over the cited reference and reversal of the Examiner's Final Rejection thereof is warranted.

IX. CONCLUSION

For the factual and legal reasons set forth above, it is respectfully submitted that the application, including claims 1-9, is in condition for allowance. Reversal of the Examiner's final rejection is believed to be warranted.

Respectfully submitted,

Stephen Cannavale Registration No. 44,585 Attorney for Applicant(s)

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CLAIMS CURRENTLY ON APPEAL

1. A connector for attachment to an extending transformer stud comprising: an elongate central body having a longitudinal bore, opening at one end for insertable accommodation of said transformer stud;

an elongate conductor accommodating body extending along said central body in side-by-side relationship, said conductor accommodating body including a plurality of spaced apart conductor insertion apertures, said apertures being spaced along the length of said conductor accommodating body so as to be longitudinally coextensive with said longitudinal bore of said central body.

- 2. A connector at claim 1 wherein said central body includes at least one said screw receiving aperture in communication with said longitudinal bore.
- 3. A connector of claim 1 wherein said conductor accommodating body includes a plurality of said screw receiving aperture in communication with said conductor insertion apertures.
- 4. A connector of claim 3 further including an additional elongate conductor accommodating body extending along said central body in side-by-side relationship thereto.
- 5. A connector of claim 4 wherein said additional body includes a plurality of spaced apart additional conductor receiving apertures, said additional apertures being spaced along the length of said additional body so as to be longitudinally coextensive with said longitudinal bore of said central body.
- 6. A connector of claim 5 wherein said additional conductor accommodating body includes a plurality of additional set screw receiving apertures in communication with said additional conductor insertion apertures.
- 7. A connector of claim 6 wherein said conductor receiving apertures of said conductor accommodating body and said additional conductor receiving apertures of said additional conductor accommodating body having conductor insertion openings facing in the same direction.
- 8. A connector of claim 7 wherein said conductor receiving body and said additional conductor receiving body are on opposite sides of said central body.
- 9. A connector of claim 8 wherein said conductor receiving body, said central body of said additional conductor receiving body are arranged in stepwise succession